

LISTING OF CLAIMS

The following listing of claims is provided solely for the convenience of the Examiner.

1. **(Previously Presented)** A method for agent-based monitoring of network devices in an enterprise network, comprising:

selecting one of the network devices from the enterprise network, each network device having characteristics;

selecting one of a plurality of agent templates based on one or more of the characteristics of the selected network device, the agent template comprising a hierarchy of object classes, wherein each object class corresponds to a possible combination of the characteristics of the selected network device; and

instantiating an agent object from the object class of the agent template that corresponds to the characteristics of the selected network device, the instantiated agent object operable to monitor hardware characteristics of the network device.

2. **(Previously Presented)** The method of claim 1, wherein the characteristics of the network device include at least one Management Information Base (MIB) parameter.

3. **(Previously Presented)** The method of claim 1, wherein the characteristics include one or more of a type of network device, an identity of a vendor, a model number, a product line, or a hardware characteristic.

4. **(Previously Presented)** The method of claim 1, wherein monitoring includes retrieving information associated with one or more of the hardware characteristics of the network device.

5. **(Previously Presented)** The method of claim 4, wherein the hardware characteristics of the network device include one or more of:

memory usage;

chassis temperature;
Central Processing Unit (CPU) usage;
fan status;
module status; or
power supply status.

6. **(Previously Presented)** The method of claim 4, wherein monitoring includes comparing a threshold value to the retrieved information associated with one or more of the hardware characteristics.

7. **(Previously Presented)** The method of claim 6, further comprising automatically communicating an alert in response to the hardware characteristic violating the threshold value.

8. **(Previously Presented)** The method of claim 1, wherein the hierarchy of object classes includes a plurality of parent objects and at least one child object associated with each of the parent objects, the parent objects corresponding to different embodiments of a first characteristic of the network device and each child object being associated with different embodiments of a second characteristic and the embodiment of the first characteristic that corresponds to the parent object associated with the child object.

9. **(Previously Presented)** Software comprising executable instructions stored on a machine-readable medium, the software operable to:

select one of the network devices from the enterprise network, each network device having characteristics;

select one of a plurality of agent templates based on one or more of the characteristics of the selected network device, the agent template comprising a hierarchy of object classes, wherein each object class corresponds to a possible combination of the characteristics of the selected network device; and

instantiate an agent object from the object class of the agent template that corresponds to characteristics of the selected network device, the instantiated agent object operable to monitor hardware characteristics of the network device.

10. **(Previously Presented)** The software of claim 9, wherein the characteristics of the network device include at least one MIB parameter.

11. **(Previously Presented)** The software of claim 9, wherein the characteristics include one or more of a type of network device, an identity of a vendor, a model number, a product line, or a hardware characteristic.

12. **(Previously Presented)** The software of claim 9, wherein monitoring hardware characteristics includes retrieving information associated with one or more of the hardware characteristics of the network device.

13. **(Previously Presented)** The software of claim 12, wherein the hardware characteristics of the network device includes one or more of:

- memory usage;
- chassis temperature;
- Central Processing Unit (CPU) usage;
- fan status;
- module status; or
- power supply status.

14. **(Previously Presented)** The software of claim 12, wherein monitoring hardware characteristics includes comparing a threshold value with at least one of the hardware characteristics.

15. **(Previously Presented)** The software of claim 14, further operable to automatically

communicate an alert in response to the at least one of the hardware characteristics violating the threshold value.

16. **(Previously Presented)** The software of claim 9, wherein the agent object includes a parent object and at least one child object, the parent object associated with the network device and each child associated with one of the hardware characteristics.

17. **(Previously Presented)** A system for agent-based monitoring of network devices in an enterprise network, comprising:

memory operable to store information associated with a plurality of network devices in the enterprise network, the information stored in the memory comprising characteristics of each of the plurality of network devices; and

one or more processors collectively operable to:

select one of the network devices from the enterprise network;

select one of a plurality of agent templates based on one or more of the characteristics of the selected network device, the agent template comprising a hierarchy of object classes, wherein each object class corresponds to a possible combination of the characteristics of the selected network device; and

instantiate an agent object from the object class of the agent template that corresponds to the characteristics of the selected network device, the instantiated agent object operable to monitor hardware characteristics of the network device.

18. **(Previously Presented)** The system of claim 17, wherein the characteristics of the network device include at least one MIB parameter.

19. **(Previously Presented)** The system of claim 17, wherein the characteristics include one or more of a type of network device, an identity of a vendor, a model number, a product line, or a hardware characteristic.

20. **(Previously Presented)** The system of claim 17, wherein the instantiated agent object includes processors operable to retrieve information associated with one or more of the hardware characteristics of the network device.

21. **(Previously Presented)** The system of claim 20, wherein the hardware characteristics of the network device include one or more of:

- memory usage;
- chassis temperature;
- Central Processing Unit (CPU) usage;
- fan status;
- module status; or
- power supply status.

22. **(Previously Presented)** The system of claim 20, wherein the agent object compares a threshold value to the retrieved information associated with one or more of the hardware characteristics.

23. **(Previously Presented)** The system of claim 22, wherein the agent object automatically communicates an alert in response to one or more of the hardware characteristics violating the threshold value.

24. **(Previously Presented)** The system of claim 17, wherein the hierarchy of object classes includes a plurality parent objects and at least one child object associated with each of the parent objects, the parent objects corresponding to different embodiments of a first characteristic of the network device and each child object being associated with different embodiments of a second characteristic that corresponds to the parent object associated with the child object.

25. **(Previously Presented)** A method for agent-based monitoring of switches in an

enterprise network, comprising:

selecting one of the switches from the enterprise network, each switch having characteristics;

selecting one of a plurality of agent templates based on one or more of the characteristics of the selected switch, the agent template comprising a hierarchy of object classes, wherein each object class corresponds to a possible combination of the characteristics of the selected network device; and

instantiating an agent object from the object class of the agent template that corresponds to the characteristics of the selected network device, the instantiated agent object operable to monitor hardware characteristics of the selected switch by comparing at least one of the hardware characteristics to a threshold value, and
automatically communicating an alert in response to the at least one of the hardware characteristics violating the threshold value.

26. **(Previously Presented)** The software of claim 9, the characteristics comprising one or more of:

- a device type;
- a device vendor;
- a hardware characteristic;
- a model number; or
- a product line.

27. **(Previously Presented)** The software of claim 9, the software further operable to:

transmit using Simple Management Network Protocol (SNMP) a request for a Management Information Base (MIB) object from the selected network device, wherein the MIB object identifies a type of the network device; and

identify a class table containing a plurality of agent templates wherein the one of the plurality of agent templates is selected from the class table based on the type of the network device.